UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,077	04/25/2001	Masashi Yamawaki	02416-00008	5889

7590	09/23/2004

ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
Suite 600
1050 Connecticut Avenue, N.W.
Washington, DC 20036-5339

EXAMINER
TORRES, JUAN A

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/841,077	YAMAWAKI, MASASHI
	Examiner	Art Unit	
	Juan A Torres	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2001*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All   b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to because in FIG. 18 label (109) and in FIG. 19 label (116) should read "DATA DEMODULATOR". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 8 is objected to under 37 CFR 1.75(c), as being of improper

dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the

claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 8 is the same as claim 6.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1, 10,11,13 and 14 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the predetermined mark " in page 54 line 3.

There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the predetermined mark " in page 55 line 7,

"the memory medium" in page 55 line 9-10, "the synchronization" in page 55 line

10, "the series of data" in page 55 line 10, "the controller unit" in page 55 line 10,

"the read channel unit" in page 55 line 10-11, "the predetermined marks" in page

55 line 11-12. There is insufficient antecedent basis for these limitations in the

claim.

Claim 11 recites the limitation "the predetermined mark " in page 55 line

18. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation " the generation timing" in page 55 line 29-

30. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation " the detection line " in page 56 line 3-4.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in
public use or on sale in this country, more than one year prior to the date of application for patent in
the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Park (US 5631783).

As per claim 1 Park (US 5631783) figure 8 and in column 7 lines 36-51

discloses a data processor for demodulating a series of data including a

predetermined mark, compressing a receiving unit (blocks 32 and 38) for

receiving a series of data in a plurality of parallel bits (8 bits in parallel), a

detecting unit (block 32) for detecting a predetermined mark for detecting

synchronization (column 3 line 32-34) from the parallel data (8 bits in parallel).

As per claim 2 Park (US 5631783) in figure 8 discloses a data processor

where said detecting unit detects the predetermined mark (column 7 line 44-45)

for detecting synchronization (column 3 line 32-34) in a predetermined bit width

(column 5 line 52-54) among the series of data in parallel (8 bits in parallel).

As per claim 3 Park (US 5631783) in figure 8 discloses a timing selecting unit (block 304 column 8 line 5) for selecting the generation timing (column 7 line 66) of the window for detecting predetermined mark (column 7 line 44-45) based on the predetermined mark for detecting synchronization (column 3 line 32-34).

As per claim 4 Park (US 5631783) in figure 8 discloses data demodulating unit (block 36) for demodulating the series of data between the predetermined marks (column 7 line 44-45) for detecting synchronization (column 3 line 32-34) based on the predetermined mark.

As per claim 5 Park (US 5631783) in figure 8 discloses a detection line (block 32) memory unit for storing (block 302 column 7 line 52) the detection line based on the predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34).

As per claims 6 and 8 Park (US 5631783) in figure 8 discloses a data selecting unit (column 7 lines 46-51) for selecting the data based on the predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34).

As per claim 7 Park (US 5631783) in figure 8 discloses a data counting unit (block 34 column 7 line 61) for counting the series of data between the predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34).

As per claim 9 Park (US 5631783) in figure 8 discloses receiving unit (blocks 32 and 38) is provided with a shift register (block 38, column 8 lines 1-4) to input the data of a plurality of parallel bits (8 bits in parallel) connected with the

detecting unit (block 32) in the same number as the number of parallel bits (8 bits

in parallel)

As per claim 10 Park (US 5631783) in figure 8, discloses a data processor

for detecting the predetermined mark (column 7 line 44-45) for detecting

synchronization (column 3 line 32-34) included in a series of data read from the

memory medium (block 10, column 6 line 39-43) in order to establish the

synchronization at the time of transferring the series of data to the controller unit

(block 28, column 7 line 27) from the read channel unit (block 10, column 6 line

39-43) and for demodulating (block 36) the series of data between the

predetermined marks (column 7 line 44-45) for detecting synchronization (column

3 line 32-34), comprising a receiving unit (blocks 32 and 38) for receiving the

series of data in a plurality of parallel bits (8 bits in parallel) and a detecting unit

(block 32) for detecting the predetermined mark (column 7 line 44-45) for

detecting synchronization (column 3 line 32-34) from the parallel data

As per claim 11 Park (US 5631783) in figure 8 discloses a data processing

method for demodulating (block 36) a series of data including the predetermined

mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34),

receiving the series of data in a plurality of parallel bits (8 bits in parallel)

detecting (block 32) the predetermined mark (column 7 line 44-45) for detecting

synchronization (column 3 line 32-34) from the parallel data to establish the

synchronization of the series of data and demodulating (block 36) the data based

on the predetermined mark (column 7 line 44-45) for detecting synchronization

(column 3 line 32-34).

As per claim 12 Park (US 5631783) in figure 8 discloses a predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34) that are detected in a predetermined bit width (column 5 line 52-54) of the series of data in the parallel condition (8 bits in parallel).

As per claim 13 Park (US 5631783) in figure 8 discloses that a generation timing (block 304 column 8 line 5) of the window for detecting predetermined mark (column 7 line 44-45) is selected based on said detected predetermined mark for detecting synchronization (column 3 line 32-34).

As per claim 14 Park (US 5631783) in figure 8 discloses that a detection line is stored (block 302 column 7 line 52) based on the detected predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34).

As per claim 15 Park (US 5631783) in figure 8 discloses that the data is selected based on the detected (block 32) predetermined mark (column 7 line 44-45) for detecting synchronization (column 3 line 32-34)

As per claim 16 Park (US 5631783) in figure 8, discloses that the data between the detected predetermined marks (column 7 line 44-45) for detecting synchronization (column 3 line 32-34) is counted up (block 34 column 7 line 61).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A Torres whose telephone number is (571) 222-3119. The examiner can normally be reached on M-TH 8:00 AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (571) 222-

3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT   JAT   9-11-2004

MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER